



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: December 5, 2012

RE: Larry L. Oradat Revocable Trust / 053-32449-00075

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Registration

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice.** The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FN-REGIS.dot 1/2/08



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REGISTRATION OFFICE OF AIR QUALITY

Larry L. Oradat Revocable Trust

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. 053-32449-00075

Issued by:

Chrystal Wagner, Section Chief
Permits Branch
Office of Air Quality

Issuance Date: December 5, 2012

SECTION A

SOURCE SUMMARY

This registration is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 is descriptive information and does not constitute enforceable conditions. However, the Registrant should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Registrant to obtain additional permits pursuant to 326 IAC 2.

A.1 General Information

The Registrant owns and operates a stationary high vacuum dual phase extraction (DPE) system for the remediation of petroleum contaminated soil and groundwater.

Source Address:	3801 South Western Avenue, Marion, Indiana 46953
General Source Phone Number:	765-618-1013
SIC Code:	5541
County Location:	Grant County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

A.2 Emission Units and Pollution Control Equipment Summary

This stationary source consists of the following emission units and pollution control devices:

- (a) A high vacuum dual phase extraction (DPE) system for the remediation of petroleum contaminated soil and groundwater, which includes twelve (12) extraction wells, with a maximum soil vapor extraction rate of 150 cubic feet per minute (cfm) and a maximum groundwater flow rate of 15 gallons per minute (gpm), approved in 2012 for construction.
- (b) Paved roads and parking lots with public access.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

Terms in this registration shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-1.1-1) shall prevail.

B.2 Effective Date of Registration [IC 13-15-5-3]

Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

B.3 Registration Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation), this registration to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

B.4 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this registration.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.5 Source Modification Requirement [326 IAC 2-5.5-6(a)]

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

B.6 Registrations [326 IAC 2-5.1-2(i)]

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

C.1 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this registration:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

SECTION D.1

OPERATION CONDITIONS

Facility Description [326 IAC 2-5.1-2(f)(2)] [326 IAC 2-5.5-4(a)(2)]:

- (a) A high vacuum dual phase extraction (DPE) system for the remediation of petroleum contaminated soil and groundwater, which includes twelve (12) extraction wells, with a maximum soil vapor extraction rate of 150 cubic feet per minute (cfm) and a maximum groundwater flow rate of 15 gallons per minute (gpm), approved in 2012 for construction.
- (b) Paved roads and parking lots with public access.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

There are no emission limitations and standards applicable to this source.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH**

**REGISTRATION
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

Company Name:	Larry L. Oradat Revocable Trust
Address:	3801 South Western Avenue
City:	Marion, Indiana 46953
Phone Number:	765-618-1013
Registration No.:	051-32449-00075

- I hereby certify that Larry L. Oradat Revocable Trust is : still in operation.
 no longer in operation.
- I hereby certify that Larry L. Oradat Revocable Trust is : in compliance with the requirements of Registration No. 051-32449-00075.
 not in compliance with the requirements of Registration No. 051-32449-00075.

Authorized Individual (typed): Larry Oradat
Title: Owner
Signature:
Phone Number: 765-618-1013
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

**Indiana Department of Environmental Management
Office of Air Quality**

Technical Support Document (TSD) for a Registration

Source Description and Location
--

Source Name:	Larry L. Oradat Revocable Trust
Source Location:	3801 South Western Avenue, Marion, Indiana 46953
County:	Grant
SIC Code:	5171
Registration No.:	053-32449-00075
Permit Reviewer:	Aida DeGuzman

On October 23, 2012, the Office of Air Quality (OAQ) received an application from Larry L. Oradat Revocable Trust related to the construction and operation of a high vacuum dual phase extraction (DPE) system for the remediation of petroleum contaminated soil and groundwater.

County Attainment Status

The source is located in Grant County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM _{2.5} .	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Grant County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
 Grant County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

- (c) Other Criteria Pollutants
 Grant County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.
- (b) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Background and Description of New Source Construction

The Office of Air Quality (OAQ) has reviewed an application, submitted by Larry L. Oradat Revocable Trust on October 23, 2012, relating to the construction of the following new emission unit and pollution control device:

- (a) A high vacuum dual phase extraction (DPE) system for the remediation of petroleum contaminated soil and groundwater, which includes twelve (12) extraction wells, with a maximum soil vapor extraction rate of 150 cubic feet per minute (cfm) and a maximum groundwater flow rate of 15 gallons per minute (gpm), approved in 2012 for construction.
- (b) Paved roads and parking lots with public access.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – Registration

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Dual Phase Extraction System (DPE-1)	-	-	-	-	-	24.63	-	-	24.63	8.41 (Toluene)
Fugitives (paved roads)	1.04	0.20	0.20	-	-	-	-	-	-	-
Total PTE of Entire Source	1.04	0.20	0.20	-	-	24.63	-	-	24.63	8.41 (Toluene)

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Registration Levels**	≥ 5 but <25	≥ 5 but <25	≥ 5 but <25	≥ 10 but <25	≥ 10 but <25	≥ 10 but <25	≥ 25 but <100	100,000	***	***

negl. = negligible
 *Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
 **The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.
 *** For HAPs, only Lead is regulated under Registration with a threshold equal to or greater than 0.2 tons/yr but less than 5 tons/year.
 For Part 70 Permit program (40 CFR 70), single HAP threshold of 10 tons/year and 25 tons/year for combined HAPs.

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of Volatile Organic Compounds (VOC) is less than one hundred (100) tons per year, and less than twenty-five (25) tons per year but equal to or greater than five (5) tons per year. No other regulated pollutant is emitted at the proposed source. Therefore, the source is subject to the provisions of 326 IAC 2-5.1-2. A Registration will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous

- (a) 40 CFR Part 63, Subpart GGGGG (326 IAC 20-87) - National Emission Standards for Hazardous Air Pollutant for Site Remediation

This rule applies to site remediation that cleans up a remediation material, as defined in § 63.7957 at major sources of HAPs. This rule does not apply to the proposed site remediation because the source is an area source and since the remediation is conducted at a gasoline service station in order to clean up remediation material from a leaking underground storage tank.

- (b) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

- (a) 326 IAC 2-5.1-2 (Registrations)
Registrations applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- (e) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
The source is subject to the requirements of 326 IAC 6-4, because vehicular traffic have the potential to emit fugitive particulate emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because it does not have the potential fugitive particulate emissions greater than 25 tons per year. Therefore, 326 IAC 6-5 does not apply.
- (g) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (h) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

- (i) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The proposed Dual Phase Extraction System (DPE-1) is not subject to 326 IAC 8-1-6, because this system does not have the potential VOC emissions equal to or greater than twenty-five (25) tons per year.
- (j) There are no other 326 IAC 8 rules that are applicable to the proposed Dual Phase Extraction System (DPE-1).

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on October 23, 2012.

The construction and operation of this source shall be subject to the conditions of the attached Registration. The staff recommends to the Commissioner that Registration be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Aida DeGuzman at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-4972 or toll free at 1-800-451-6027 extension (3-4972).
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

Appendix A: Emissions Calculations
Air Stripper and Soil Vapor Extractor

Company Name: Larry L. Oradat Revocable Trust
Address City IN Zip: 3801 South Western Avenue, Marion, IN
Registration Number: 053-32449
Pit ID: 053-00075
Reviewer: Aida DeGuzman
Date: 23-Oct-12

Groundwater remediation system (air stripper)

GROUND WATER HAPS PTE

Conditions																		
Water Flow =		15 GPM																
Contaminant	Conc. in ug/L	X	3.785 L/gal	X	gal./min	X	60 min/hr	X	g/1000000 ug	X	Kg/ 1000 g	X	2.2046 lbs/ Kg	X	8760 hr/yr	X	ton/ 2000 lb.	
Benzene	13900		52611.5	ug/gal	789172.5000	ug/min	47350350	ug/hr	47.35035	g/hr	0.04735035	kg/hr	0.104388582	lb/hr	914.4439749	lb/yr	0.46	Tons / year
Toluene	3500		13247.5		198712.5000		11922750		11.92275		0.01192275		0.026284895		230.2556771		0.12	
Ethylbenzene	2960		11203.6		168054.0000		10083240		10.08324		0.01008324		0.022229511		194.7305155		0.10	
Xylene	11080		41937.8		629067.0000		37744020		37.74402		0.03774402		0.083210466		728.9236865		0.36	
Methyl-tert-butyl-ether	499		1888.715		28330.7250		1699843.5		1.6998435		0.001699844		0.003747475		32.82788083		0.02	
Naphtalene	3800		14383		215745.0000		12944700		12.9447		0.0129447		0.028537886		249.991878		0.12	
Total																	1.18	Tons / year

Soil vapor extraction system

Conditions	Air Flow =	150	cfm
c=constant at standard condition at 68 F, 29.2 inches of HG			
		=	385260000
			cuft / lb-mole

Contaminant	Conc. in ppm	Molecular Weight (lb/lb-mole)	Emission Rate (lbs/hour)	Emission Rate (tons/year)
Benzene	172.431	78	0.31	1.38
Toluene	879.75	92.14	1.89	8.29
Ethylbenzene	105.57	106	0.26	1.15
Xylene	527.85	106.16	1.31	5.73
MTBE	527.85	85.15	1.05	4.60
Naphthalene	175.95	128.16	0.53	2.31
			Soil Vapor PTE	23.46
			TOTAL HAP PTE	24.63
			TOTAL VOC PTE	24.63

Note: Maximum percentage of HAPs in gasoline was utilized in the calculation (see gasoline MSDS).
HAP Concentration was based upon the worst case gasoline range organics (GRO) plus diesel range organics (DRO) from same soil boring sample.

**Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads**

Company Name: Larry L. Oradat Revocable Trust
Source Address: 6600 Highway 12 – Burns Waterway, Portage, IN 46368
Registration No.: 051-32449-00075
Reviewer: Aida DeGuzman
Date: 10/23/2012

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (12/2003).

Vehicle Information (provided by source)

Type	Maximum number of vehicles	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	1500.0	1.0	1500.0	5.0	7500.0	125	0.024	35.5	12961.6
Vehicle (leaving plant) (one-way trip)	1500.0	1.0	1500.0	5.0	7500.0	125	0.024	35.5	12961.6
Total			3000.0		15000.0			71.0	25923.3

Average Vehicle Weight Per Trip =

5.0	tons/trip
-----	-----------

Average Miles Per Trip =

0.02	miles/trip
------	------------

Unmitigated Emission Factor, Ef = $[k * (sL/2)^{0.65} * (W/3)^{1.5} - C]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	
where k =	0.082	0.016	lb/mi = particle size multiplier (AP-42 Table 13.2.1-1)
W =	5.0	5.0	tons = average vehicle weight (provided by source)
C =	0.00047	0.00047	lb/mi = emission factor for vehicle exhaust, brake wear, and tire wear (AP-42 Table 13.2.1-2)
sL =	0.6	0.6	g/m ² = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1-3 for summer months)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E * [1 - (p/4N)]$

Mitigated Emission Factor, Eext = $Ef * [1 - (p/4N)]$
where p =

125	days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
-----	---

N =

365	days per year
-----	---------------

	PM	PM10	
Unmitigated Emission Factor, Ef =	0.08	0.02	lb/mile
Mitigated Emission Factor, Eext =	0.07	0.01	lb/mile
Dust Control Efficiency =	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Uncontrolled PM PTE (tons/yr)	Uncontrolled PM10/PM2.5 PTE (tons/yr)	Controlled (Due to natural mitigation) PM PTE (tons/yr)	Controlled (Due to natural mitigation) PM10/PM2.5 PTE (tons/yr)	Controlled (Fugitive Dust Control Plan) PTE of PM (tons/yr)	Controlled (Fugitive Dust Control Plan) PTE of PM10/PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.52	0.10	0.48	0.09	0.24	0.05
Vehicle (leaving plant) (one-way trip)	0.52	0.10	0.48	0.09	0.24	0.05
	1.04	0.20	0.95	0.18	0.48	0.09

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per day (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per day (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Larry Oradat
Larry L. Oradat Revocable Trust
3160 E 200 S
Marion, IN 46953

DATE: December 5, 2012

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Registration
053-32449-00075

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Jeff Jacob – Creek Run LLC Environmental Engineering
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

Mail Code 61-53

IDEM Staff	GHOTOPP 12/5/2012 Larry L. Oradat Revocable Trust 053-32449-00075 final		Type of Mail: CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

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1		Larry Oradat Larry L. Oradat Revocable Trust 3160 E 200 S Marion IN 46953 (Source CAATS) via confirmed delivery										
2		Marion City Council and Mayors Office 301 S. Branson Street Marion IN 46952-4052 (Local Official)										
3		Grant County Commissioners 401 South Adams Marion IN 46953 (Local Official)										
4		Ms. Mary Shipley 10968 E 100 S Marion IN 46953 (Affected Party)										
5		Grant County Health Department 401 S. Adams St, Courthouse Complex Marion IN 46953-2031 (Health Department)										
6		Mr. Thomas Lee Clevenger 4005 South Franks Lane Selma IN 47383 (Affected Party)										
7		Jeff Jacob Creek Run LLC Environmental Engineering PO Box 114 Montpelier IN 47359 (Consultant)										
8		Fairmount Door Corporation 703 West 38th Street Marion IN 46952 (Affected Party)										
9												
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7			